

ATTACHMENT A
Remarks

Claims 1-20 are pending in the present application, with claims 1-3, 5-8, 11-14, 16, 17 and 19 being rejected; and claims 4, 9, 10, 15 and 18 indicated as being allowable. By this Amendment, Applicant has added new claim 20. Applicant respectfully requests that the rejection to the claims be reconsidered and that all claims be found allowable based on the discussion which follows.

In the outstanding Office Action, claims 1-3, 5-8, 11-14, 16, 17 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Rosene et al. (U.S. Patent No. 5,752,424) (hereinafter "Rosene"). In the rejection, the Examiner alleges that Rosene discloses a plunger 20, a guide bushing 26, a bore 50, an annular groove 96, holding elements 55, transverse bores 60, a punch die 90, a flange 100 and tapered transverse bores. The Examiner correctly acknowledges that Rosene does not teach a washer. However, the Examiner alleges that it would have been obvious to one of ordinary skill to modify the C-ring 80 to form the claimed washer.

Contrary to the rejection, Rosene fails to teach or in any way make obvious all claimed elements, namely the claimed holding element located in transverse bores in a die plunger, which holding elements releasably engage an annular groove in a punching die; and (2) an elastic washer, wherein the holding elements are maintained in engagement with the annular groove by means of an elastic washer, which elastic washer can be widened to a diameter greater than the interior diameter of a guide bushing when the die plunger is removed from the guide bushing. Accordingly, Rosene fails to anticipate or in any way make obvious the claimed invention.

Examining the Rosene device in more detail, although the Examiner has alleged that one of ordinary skill in the art would modify Rosene's C-ring 80 to form the claimed washer, nowhere in the Rosene disclosure is there any indication or discussion that C-ring 80 functions as an elastic washer, as claimed. In fact, in regard to C-ring 80, the disclosure of Rosene indicates that the material must be rigid in order to function as a C-ring in its device (see, e.g., column 4, line 66-column 5, line 16). Therefore, one of ordinary skill in the art would not substitute an elastic washer for the C-ring 80.

Moreover, it would not have been obvious to one of ordinary skill in the art to modify the C-ring 80 to be an elastic washer, as the mechanisms by which the Rosene punch die is lockably attached to the die plunger 20 is completely different from the elastic washer claimed. Therefore, one of ordinary skill in the art would not be led to modify the C-ring 80 to arrive at the claimed elastic washer. For example, Rosene, column 5, lines 1-44, discloses the following releasably locking mechanism:

The annular portion of the C-ring 80 is received in an annular groove 78 extending about a major portion of the outer perimeter of the moveable locking element 70, and the pin 81 passes through a radial aperture 79 in the element 70 into one of the recesses 72.

In operation, the pin 81 slides in and out of a dimple 65 as the moveable locking element 70 is rotated with respect to the fixed locking element 40. The pin 81 rests in the dimple 65 when the moveable locking element 70 is in the locked position to prevent movement between the moveable locking element 70 and the fixed locking element 40. As the moveable locking element 70 is rotated about the fixed locking element 40 toward the released position, the pin 81 slides out of the dimple 65 and over the outer surface 46 of the side wall 42.

The fixed locking element 40 and moveable locking element 70 work in concert with a tool piece 90 to releasably attach the tool piece 90 to the punch body 20. Referring to FIGS. 1 and 11, the tool piece 90 has a shank 92 having a mid-section 94, and a workpiece-deforming tip 102. The shank 92 includes an upper end surface 99, upper and lower axially spaced, cylindrical stabilizing surfaces 97, 98, and a desirably

frustoconical retaining surface 96 positioned therebetween. The upper and lower stabilizing surfaces 97, 98 preferably slidably mate with the inner surface 44 of the tool receiving basin 50 so that the stabilizing surfaces 97, 98 have substantial surface to surface contact with the inner surface 44. The retaining surface 96 is inclined at an acute angle with respect to the longitudinal axis of the punch body towards the workpiece deforming tip. In a preferred embodiment, the retaining surface 96 is a truncated cone having its base at the stabilizing surface 97. The mid-section 94 extends downwardly from the stabilizing surface 97, and the workpiece-deforming tip 102 extends downwardly from the mid-section 94. The mid-section 94 has an upwardly-facing, annular compression shoulder 100 positioned substantially normal to the axial movement of the punch 15 so as to uniformly engage the rim 48 of the fixed locking element in substantial surface to surface contact around the full perimeter of the rim 48. The operation of the locking mechanism 39 and the tool piece 90 will become more apparent by referring to the punch assemblies depicted in FIGS. 12 and 12A and FIGS. 13 and 13A.

Based on the disclosure, one of ordinary skill in the art would have no reason to modify the C-ring 80 to be an elastic washer, as doing so would thwart the formation of C-ring 80. Moreover, modifying C-ring 80 to be an elastic washer serves no purpose in the Rosene device. Accordingly, one of ordinary skill in the art would not be led to modify the device of Rosene to arrive at the claimed invention.

Furthermore, the C-ring 80 does not hold elements/bearings/balls 55 in engagement with the punching die by means of a biasing force provided by the claimed washer. To the contrary, bearing 55 is disclosed as being slidably positioned in each hole 60, where bearing 55 may be movable within its corresponding hole 60 between a locked position, shown by phantom line 64, and a release position, shown by phantom line 67 (see Figures 1 and 12a and column 4, lines 22-29). Therefore, C-ring 80 clearly does not maintain bearings/balls 55 in engagement with an annular groove by means of an elastic washer, as claimed. Furthermore, referring to Rosene Figure 12, clearly C-ring 80 does not hold elements/balls 55 in engagement with the punching die by means of a biasing force synonymous with the claimed elastic washer and its

configuration in the claimed device. Accordingly, C-ring 80 does not read on/anticipate the claimed elastic washer.

Based on the foregoing, claims 1-3, 5-8, 11-14, 16, 17 and 19 are not obvious from Rosene, which fails to teach or in any way make obvious the claimed holding element located in transverse bores in a die plunger, which holding elements releasably engage an annular groove in a punch die and an elastic washer, wherein the holding elements are maintained in engagement with the annular groove by means of an elastic washer, which washer can be widened to a diameter greater than the inner diameter of a guide bushing when the die plunger is removed from the guide bushing.

Finally, by this Amendment, Applicant has added new claim 20, which further recites that the elastic washer provides a radially inward biasing force on the holding elements. Subject matter basis for new claim 20 can be found in the specification as filed and, therefore, claim 20 does not present new matter. Claim 20 is further clear of Rosene as Rosene fails to teach an elastic washer providing a radially inward biasing force on bearings/balls 55.

Applicant gratefully appreciates the Examiner's indication of the allowable subject matter of claims 4, 9, 10, 15 and 18. In view of the foregoing remarks, Applicant respectfully submits that all pending claims are in condition for allowance.

END REMARKS